

### **REMARKS**

Applicant acknowledges with appreciation the examiner's indication that claims 10 and 24 would be allowable if rewritten into independent form. New claims 30 and 31 include the limitations of claims 10 and 24, respectively, written in independent form. Accordingly, Applicants submit that new claims 30 and 31 are in condition for allowance. Such action is respectfully requested.

In an illustrated embodiment of the present invention, a video camera stabilization system and method is provided which compensates for image motion due to unintentional camera movement. In one illustrated embodiment, first and second images captured by the video camera are analyzed to determine the presence of such unintentional camera movement. The first and second images are first aligned based on signals indicative of the camera's intended field of view, such as changes in the pan, tilt and zoom controls of the camera. Once aligned, an image difference between the first and second images is determined based on a comparison of stationary background portions of the first and second images. Movement of the stationary background portion during the interval between the capture of the first and second images (after aligning the images based on intentional camera movement) is attributed to unintentional camera movement. An electronic stabilizing adjustment then corrects for the unintentional camera movement. The stabilization system of an illustrated embodiment can ignore the presence of the at least one moving object when determining the stabilizing adjustment. See, for example, paragraphs [0052] - [0059] on pages 18 and 19 of the present application.

### **THE EXAMINER'S REJECTIONS**

The Examiner rejected claims 1-8, 11-22, and 25 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0183917 to von Flotow et al (hereinafter "von Flotow"). The Examiner rejected claims 9 and 23 under 35 U.S.C. §103(a) as being unpatentable over von Flotow in view of U.S. Patent No. 6,809,758 to Jones (hereinafter "Jones").

Applicant does not admit that von Flotow qualifies as prior art against the present application. Applicant reserves the right to file a Declaration under 37 C.F.R. 1.131 to swear behind von Flotow.

### REQUIREMENTS FOR ANTICIPATION

For a reference to anticipate a claim, the reference must teach every element of the claim. See Manual of Patent Examining Procedure, ("MPEP"), § 2131 (8<sup>th</sup> ed. 2001). (citing Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) and Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) ("The identical invention must be shown in as complete detail as is contained in the ... claim.")). See also Teleflex Inc. v. Ficosa North America Corp., 299 F.3d 1313, 63 USPQ2d 1374 (Fed. Cir. 2002 ) ("As we [the Federal Circuit] have repeatedly stated, anticipation requires that each limitation of a claim must be found in a single reference. "). General Electric Co. v. Nintendo Co., 179 F.3d 1350, 1356, 50 USPQ2d 1910, 1915 (Fed. Cir. 1999) ("[A]nticipation requires that a single prior art reference disclose every limitation in a patent claim.") (citing PPG Indus., Inc. v. Guardian Indus. Corp., 75 F.3d 1558, 1566, 37 USPQ2d 1618, 1624 (Fed. Cir. 1996)).

### THE DISCLOSURE OF VON FLOTOW

Von Flotow relates to a stabilization system for an airborne video camera. Although von Flotow suggests in passing in paragraph [0059] that the camera may be stationary, the description and drawings focus only on a camera mounted to an airplane or other moving vehicle. Von Flotow discloses a mechanical adjustment system for a gimbal to physically move the camera and assist with keeping a moving object in a center of the field of view of the camera. Von Flotow also discloses an adjustment to an image to compensate for unintentional movement. However, von Flotow does not disclose or suggest determining whether or not unintentional camera movement has occurred based on movement of a stationary background portion of first and second aligned images. Von Flotow also does not disclose or suggest ignoring the presence of a moving object in the field of view when determining the stabilizing adjustment.

### CLAIM AMENDMENTS

Applicants have amended independent claims 1, 13, 17 and 25 of the present application to more particularly point out and distinctly claim features of the present invention. Applicants respectfully traverse the Examiner's rejections of independent claims 1, 13, 17 and 25 as being anticipated by Von Flotow to the extent that such rejections still apply to the claims as amended.

**Claim 1**

Independent claim 1 has been amended to more particularly point out and distinctly claim that the analysis comprises "aligning one of said first and second images with the other of said first and second images based upon said signals indicative of the field of view", "determining the occurrence of unintentional camera movement based on movement of a stationary background portion of the aligned first and second images", and "compensating for the occurrence of unintentional movement".

As discussed above, Von Flotow does not disclose or suggest determining the occurrence of unintentional camera movement based on movement of a stationary background portion of the aligned first and second images. For at least these reasons, Applicant submits that independent claim 1, as amended, patentably defines the invention over von Flotow. Therefore, Applicants submit that independent claim 1 as well as dependent claims 2-6, 8-12 and 27-29 are in condition for allowance. Such action is respectfully requested.

**Claim 13**

Independent claim 13 has been amended to more particularly point out and distinctly claim that the analysis comprises "aligning the current and previously captured images based upon said signals indicative of said at least one camera parameter" and "determining the occurrence of unintentional camera movement based on movement of a stationary background portion of the aligned images".

As discussed above, Von Flotow does not disclose or suggest that the portion of the image displayed on the display device is selected based upon movement of a stationary background portion of the images. For at least these reasons, Applicant submits that independent claim 13 patentably defines the invention over von Flotow. Therefore, Applicants submit that independent claim 1, as well as dependent claims 14-16, are in condition for allowance. Such action is respectfully requested.

**Claim 17**

Independent claim 17 has been amended to more particularly point out and distinctly claim that determining a stabilizing adjustment for the second image comprises "aligning the first and second images based upon an intended change in the field of view of the camera during an interval between the capture of the first image and the capture of the second image" and "detecting the occurrence of unintentional camera movement based on movement of a stationary

background portion of the aligned first and second images", wherein the stabilizing adjustment involves "adjusting a relative location of the selected display portion within the second image based on the detected unintentional camera movement".

As discussed above, Von Flotow does not disclose or suggest that the portion of the image displayed on the display device is selected based upon movement of a stationary background portion of the images. For at least these reasons, Applicant submits that independent claim 17 patentably defines the invention over von Flotow. Therefore, Applicants submit that independent claim 17, as amended, as well as dependent claims 18-20, 23 and 24, are in condition for allowance. Such action is respectfully requested.

**Claims 25**

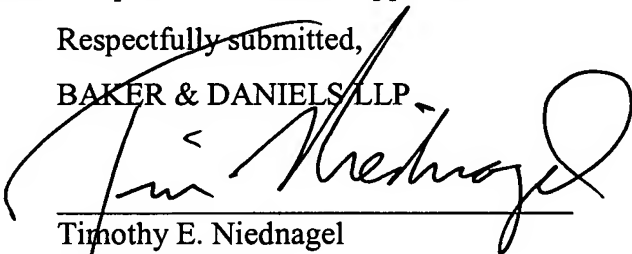
Independent claim 25 has been amended to more particularly point out and distinctly claim the steps of "aligning a current captured image and a previously captured image based upon said control signals", "determining the occurrence of inadvertent movement of the video camera by detecting movement of a stationary background portion of the aligned images after the aligning step", and "adjusting the selected portion that is displayed for at least one of the plurality of images, said adjusting step compensating for inadvertent movement of the video camera found in the determining step".

As discussed above, Von Flotow does not disclose or suggest that the portion of the image displayed on the display device is selected based upon movement of a stationary background portion of the images. For at least these reasons, Applicant submits that independent claim 25, as amended, patentably defines the invention over von Flotow. Therefore, Applicants submit that independent claim 25, as well as dependent claim 26, are in condition for allowance. Such action is respectfully requested.

In the event that the examiner has questions related to this Amendment, or to the application in the general, the undersigned would appreciate the opportunity to address those questions in a telephone interview to expedite the prosecution of this application for all concerned.

Respectfully submitted,

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